CLAIMS

1. Sensing device for sensing a physical parameter such as radiation, temperature or the like, comprising:
   - an analogue sensor element sensitive for the physical parameter to be sensed and outputting an analogue signal and
   - an analogue two-digital converter (ADC) having an MOS input stage for receiving the analogue output signal of the sensor element so as to convert the analogue output signal to a digital output signal.

2. Sensing device according to claim 1, wherein the ADC has a differential input to which the output terminals of the analogue sensor element are connected.

3. Sensing device according to claim 2, wherein the output of the ADC is connected to a digital feedback logic in turn connected to a digital-two-analogue converter (DAC) the output signal of which is added to the output signal of the analogue sensor element.

4. Sensing device according to any one of claims 1 to 3, wherein the ADC is a sigma-delta-converter comprising an integrator and a comparator connected in series to each other.

5. Sensing device according to any one of claims 1 to 4, further comprising a decimation filter receiving the output signal of the ADC.

6. Sensing device according to any one of claims 1 to 5, further comprising a compensation temperature sensor for sensing the ambient temperature.

7. Sensing device according to any one of claims 1 to 6, further comprising a lens for selecting the direction from which radiation can be received by the analogue sensor element so as to be sensed.

8. Sensing device according to any one of claims 1 to 7, wherein the analogue sensor element is a passive element.

9. Sensor device according to claim 8, wherein the passive element is an infra-red sensor element.

10. Sensor device according to claim 9, wherein the infra-red sensor element comprises a capacitor the capacitance of which varies depending on the infra-red radiation impinging on the capacitor.

11. Sensor device according to any one of claims 1 to 10, further comprising a single line output providing the digital output signal for transmitting to a signal processing unit like e.g. a microcontroller or the like.